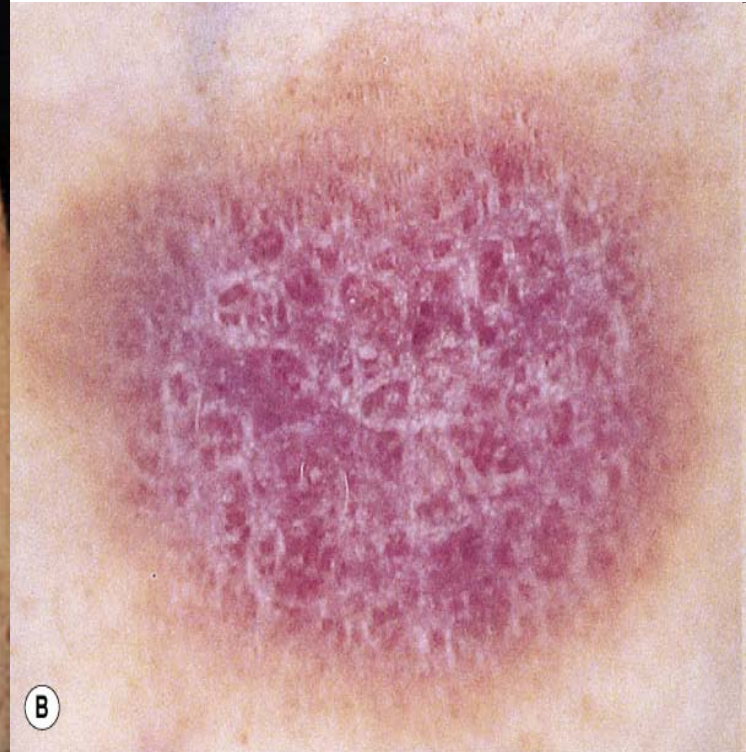


# Look-Alikes

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<http://dermis.net>







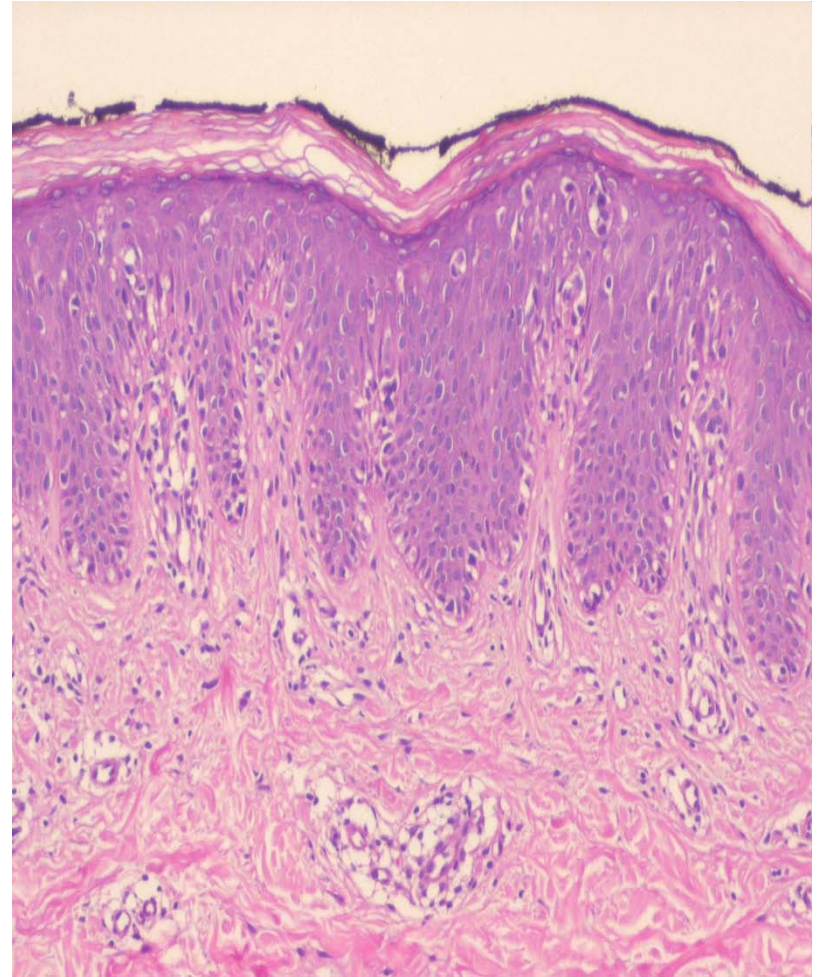
















# An approach to diagnosing a skin disease

- Look at the morphology
  - Primary lesion
  - Secondary lesion
- Configuration
- Distribution
- Histopathology













<http://dermis.net>

Diagnosis	Clinical Presentation
Erythema Migrans	Circular rash innermost portion remains dark red outer edge remains red, portion in between clears, warm, painless, fatigue, muscle and joint pain, swollen lymph nodes
Pityriasis Rosea	Herald patches singular, ovoid macule, lesion with an erythematous raised border, fine scale and central clearing
Tinea Corporis	Well-demarcated erythematous papules, plaques on the skin, borders may be raised or scaly
Sarcoidosis	Infiltrated papules and plaques, subcutaneous nodules and infiltration of old scars
Granuloma Annulare	Skin-colored to erythematous papules, smooth, raised borders, one to five cm in diameter may be isolated or coalesced into plaques
Subacute Cutaneous Lupus Erythematosus	Presents itself in annular or a papulosquamous form, arthralgias or arthritis, low grade fever, malaise or myalgias

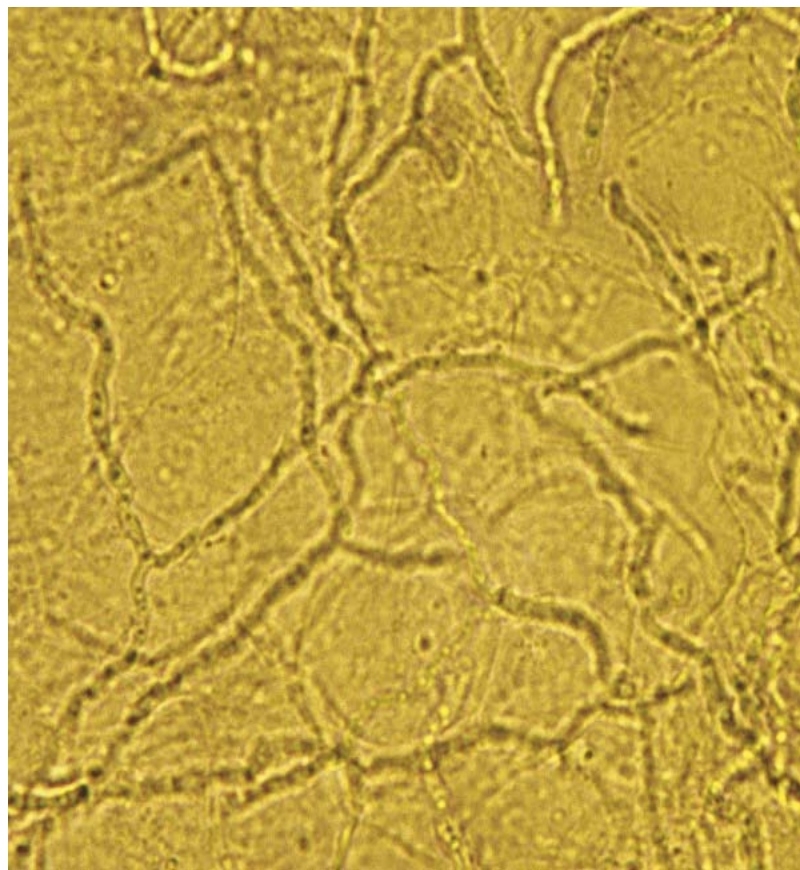
Diagnosis	Clinical Presentation
Erythema Multiforme	Central lesion surrounded by concentric rings of paleness and redness, may appear nodule, papule or macule, itching of skin, joint aches, fever
Urticaria	Pruritic, well-circumscribed erythematous lesions of the skin (wheals) with erythematous raised borders and blanched centers
Bullous Pemphigoid	Intense itching, burning sensation of the skin, redness, multiple blisters, hive like lesions
Pemphigus	Rupturing blisters on skin or mucous membranes of the skin
Acute Febrile Neutrophilic Dermatitis	Series of small red bumps on back, neck, arms and face, grow quickly in size spreading into clusters, moderate to high fever, mouth ulcers



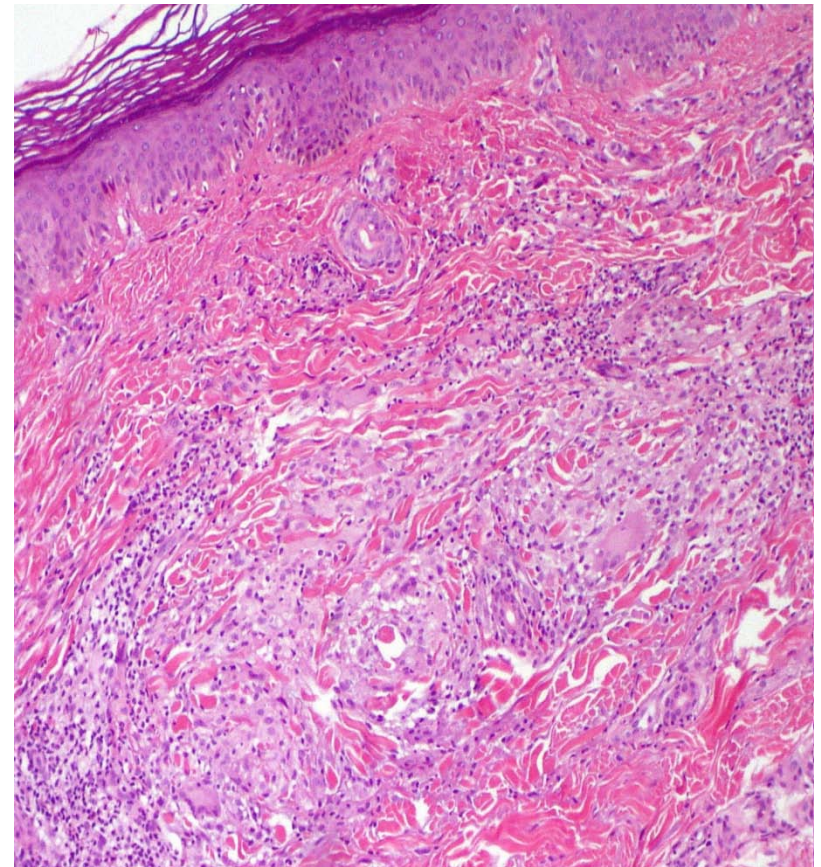


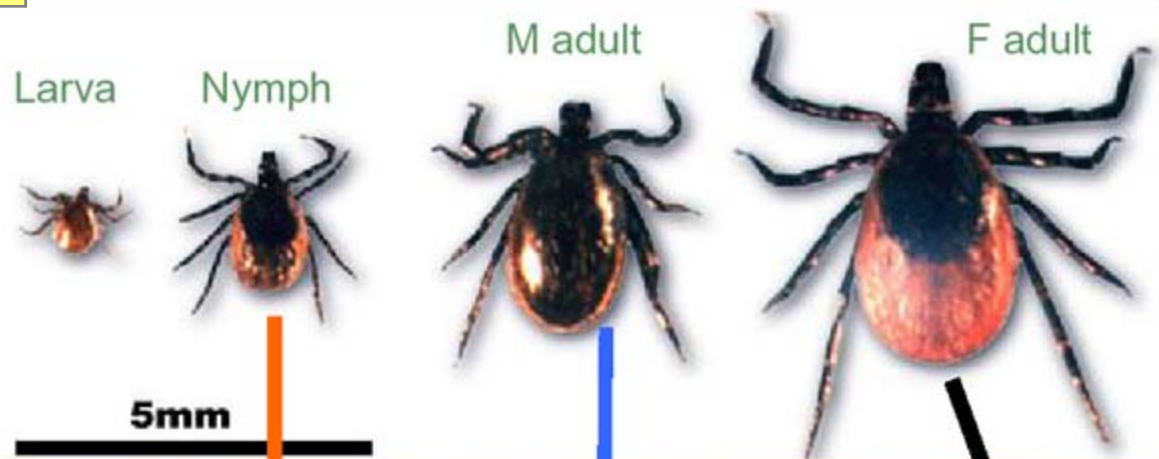






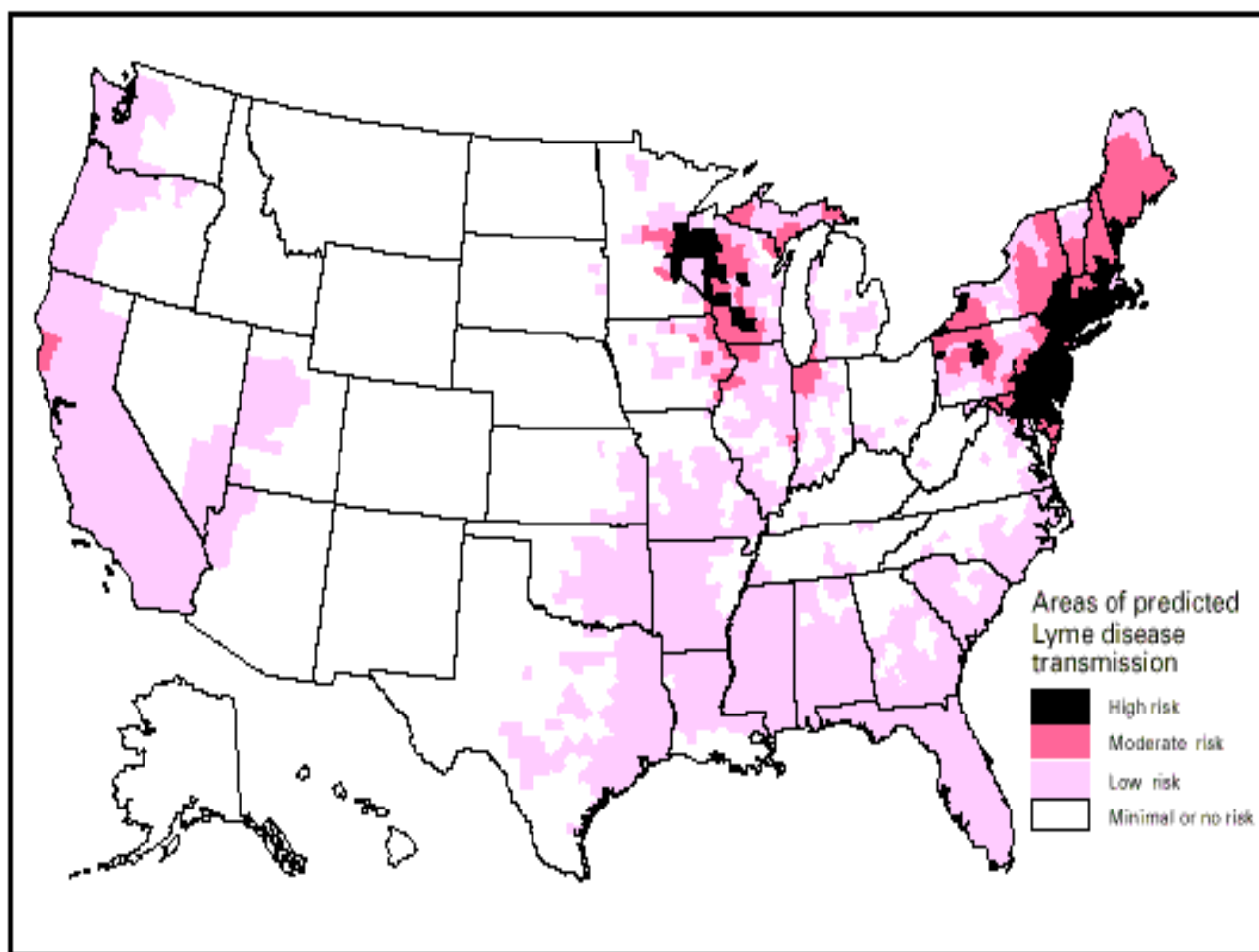








### National Lyme disease risk map with four categories of risk



Note: This map demonstrates an approximate distribution of predicted Lyme disease risk in the United States. The true relative risk in any given county compared with other counties might differ from that shown here and might change from year to year. Risk categories are defined in the accompanying text. Information on risk distribution within states and counties is best obtained from state and local public health authorities.





# Skin Features of Lyme Disease

- CDC case definition of Lyme disease
  - Three skin lesions are recognized
    - Early disease
      - Erythema migrans
      - Borrelia lymphocytoma
    - Late disease
      - Acrodermatitis chronica atrophicans

















# Testing For Lyme Disease

- **CDC recommends a two step process**
  - **1.** The first step uses an ELISA or IFA test.
  - **2.** The second step uses a Western blot test that is highly specific for Lyme disease, meaning that it will usually be positive only if a person has been truly infected



# Lyme Disease

- Lyme disease is (True or False ANSWERS)
  - 1. Named after Sir Edward Lyme who discovered the cause of the disease in 1988
  - 2. There are three different species of *B. burdorferi*
  - 3. 78% of cases of symptomatic Lyme disease present with erythema migrans
  - 4. The feeding time of the tick is important in the transmittal of Lyme disease







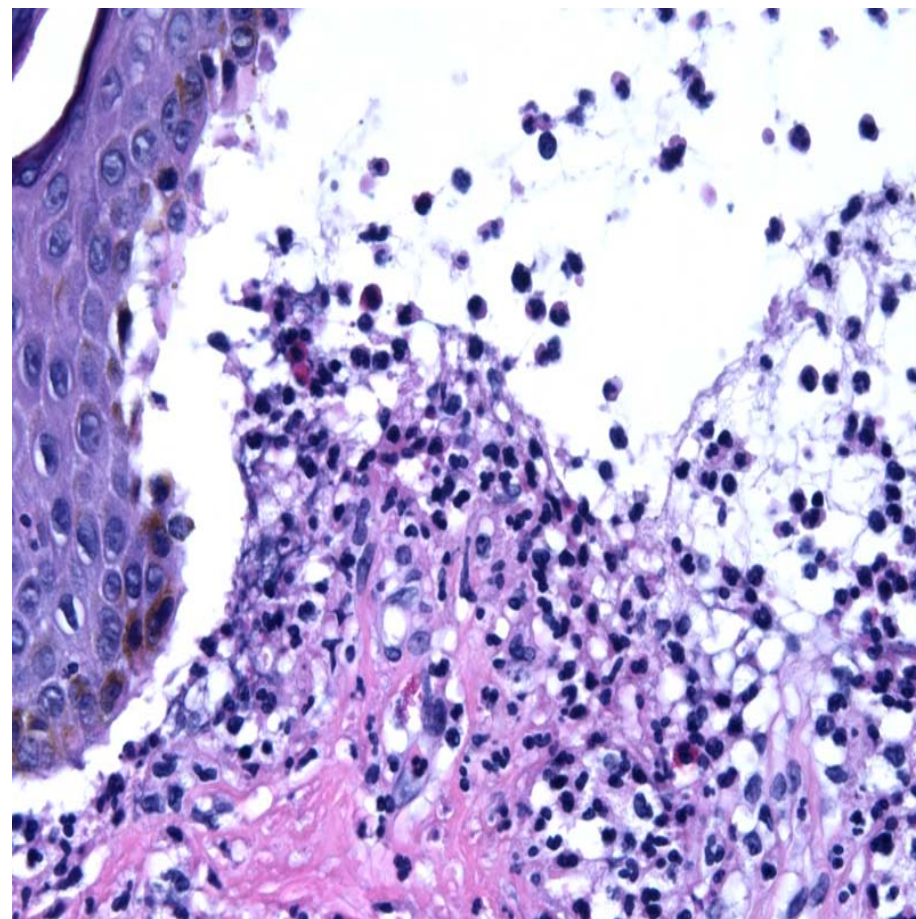




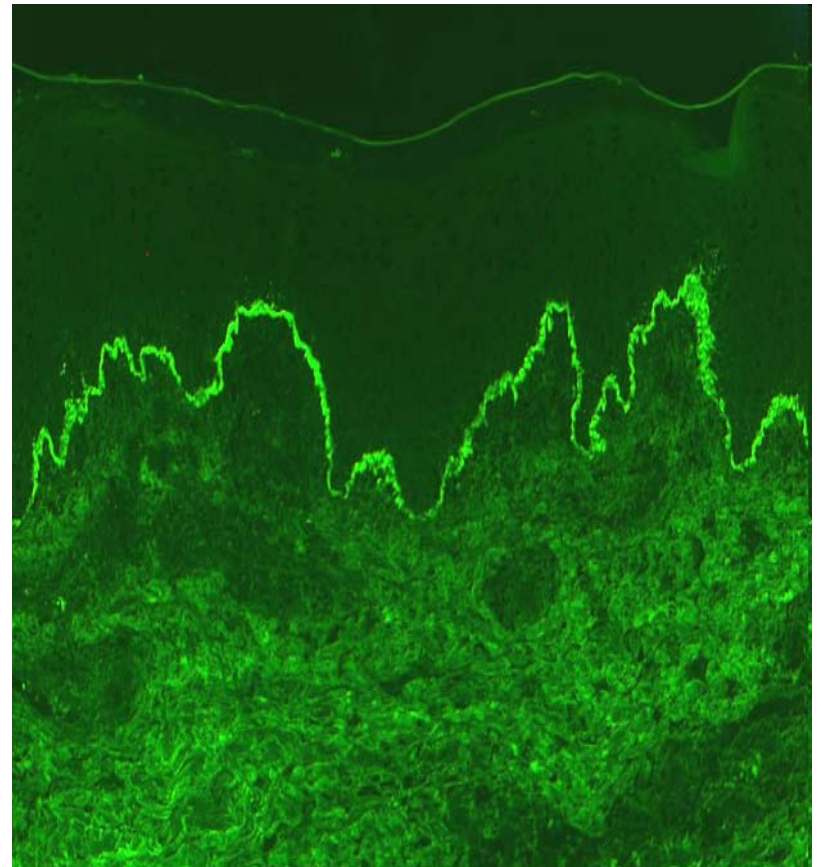
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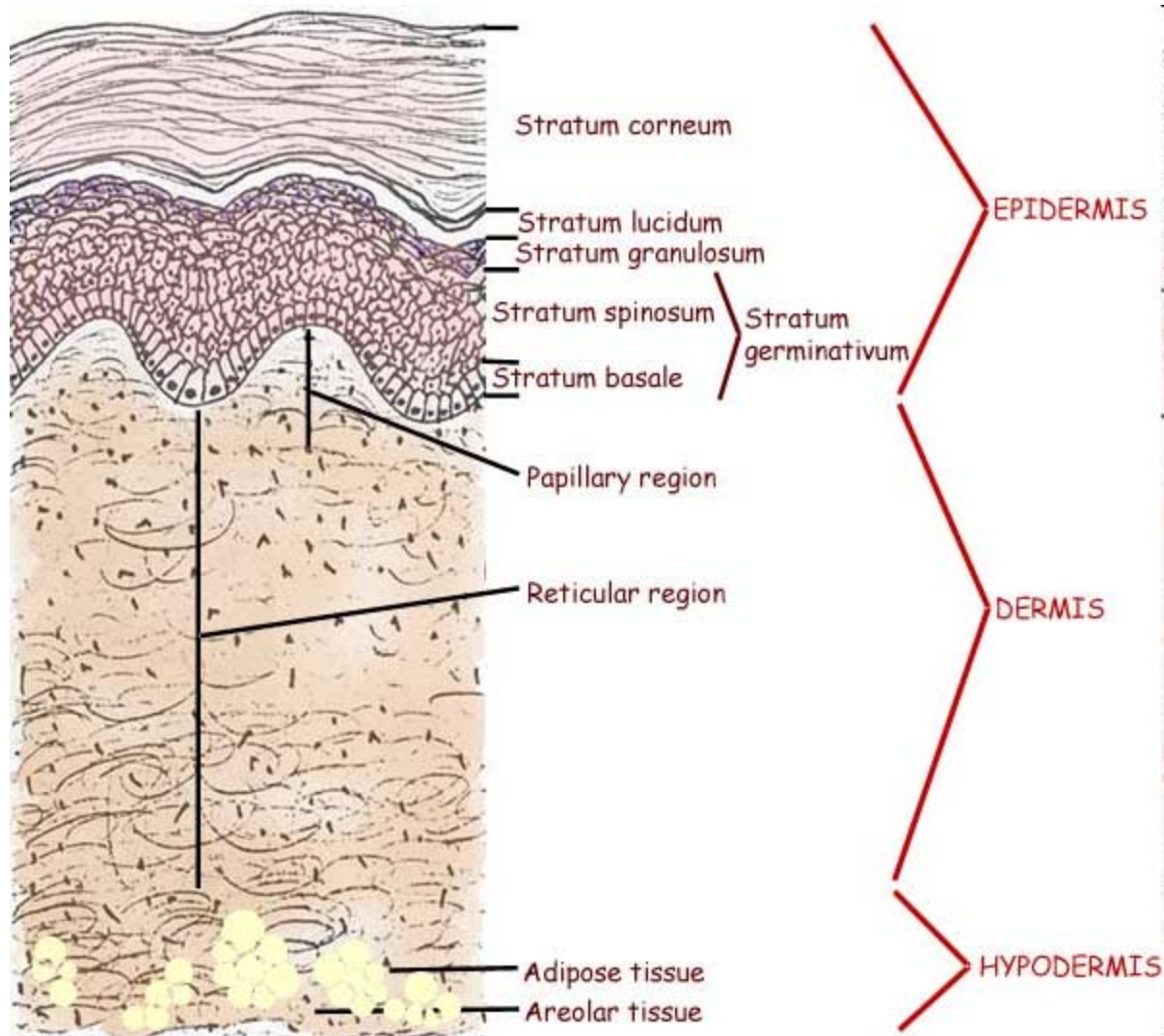


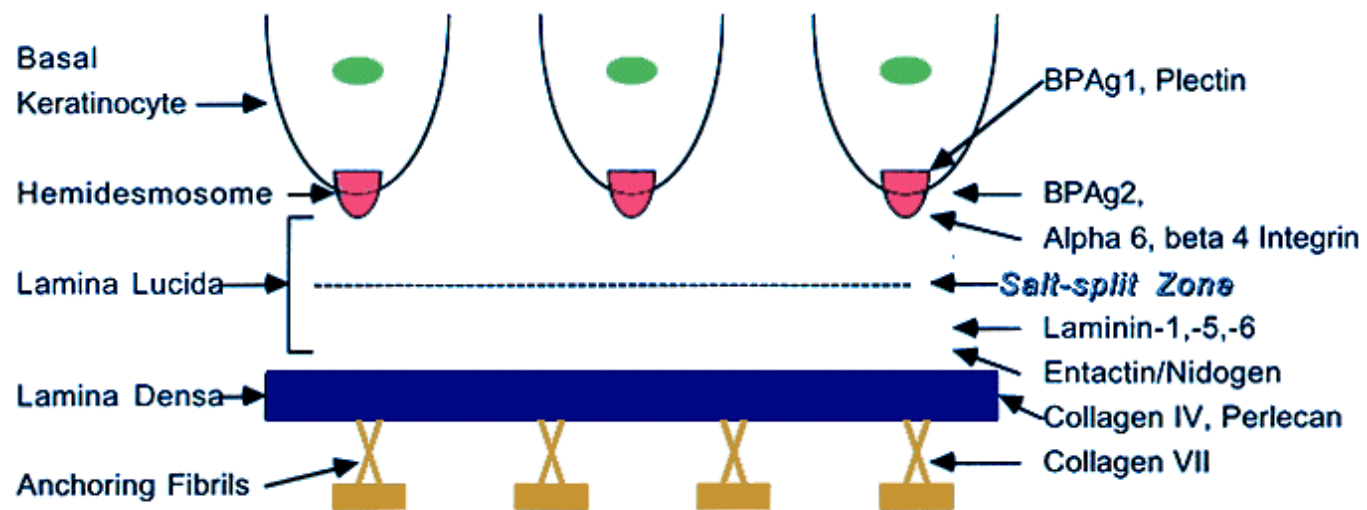














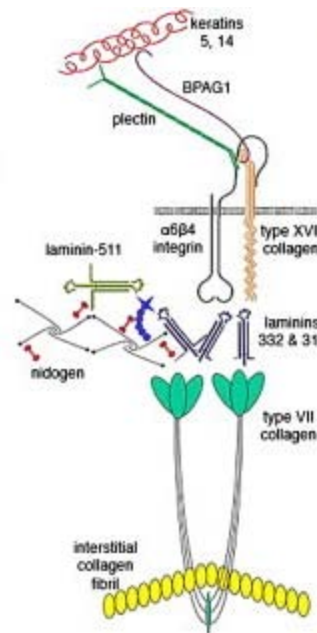
Intermediate  
filaments

Hemidesmosome

Anchoring  
filaments

Lamina  
densa

Anchoring  
Fibrils





### Spinous layer (upper and mid-epidermis)

Dermatophyte fungous infection  
Dyshidrosis  
Eczematous blister  
Friction blister  
Insect bites and scabies  
Miliaria rubra  
Viral blisters (herpes simplex, zoster)

### Granular cell layer

Bullous ichthyosiform erythroderma  
Pemphigus foliaceus  
Pemphigus erythematosus

### Subcorneal

Candida albicans infection  
Impetigo  
Miliaria crystallina  
Staphylococcal scalded skin syndrome  
Subcorneal pustular dermatosis

### Basal cell area

Erythema multiforme (epidermal type)  
Epidermolysis bullosa simplex  
Fixed drug eruption  
Kerosene necrosis  
Lichen planus  
Toxic epidermal necrolysis

### Lamina lucida

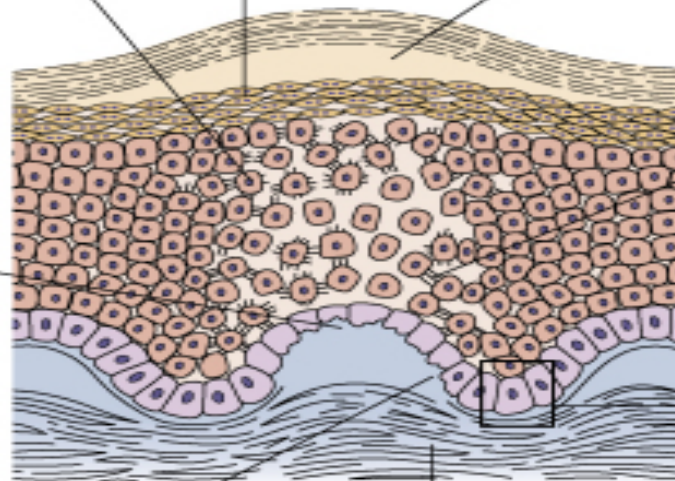
Bullous pemphigoid  
Cicatricial pemphigoid  
Dermatitis herpetiformis  
Epidermolysis bullosa acquisita  
Epidermolysis bullosa letalis  
Herpes gestationis  
Suction blister  
Thermal lesions (burns, cold, e.g., liquid nitrogen)

### Basal lamina and sublamina connective tissue

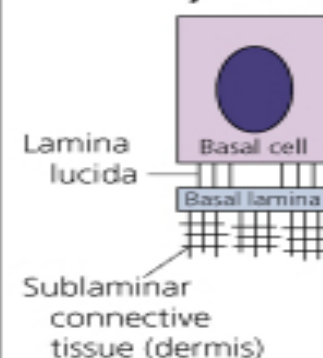
Bullous dermatosis of hemodialysis  
Bullous eruption of SLE  
Epidermolysis bullosa dystrophica  
Erythema multiforme (dermal type)  
Ischemic bullae (drug overdoses)  
Lichen sclerosus et atrophicus  
Porphyria cutanea tarda

### Spinous layer (lower epidermis and suprabasal area)

Benign familial chronic pemphigus  
Keratosis follicularis  
Pemphigus vulgaris  
Transient acantholytic dermatosis



### Ultrastructure of dermoepidermal junction



## Schematic Overview of the Epidermal Basement Membrane

